



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 3, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Mead Johnson & Company / MPR 129-18395-00021

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
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Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this revision and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Donald Poole, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Donald Poole or extension 2-8327, or dial (317) 232-8327.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

drp

cc: File - Posey County
U.S. EPA, Region V
Posey County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Scott Anslinger
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) Renewal
OFFICE OF AIR QUALITY**

**Mead Johnson & Company
State Highway 62 East
Mount Vernon, Indiana 47620**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F129-13970-00021	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 20, 2002 Expiration Date: February 20, 2007

First Administrative Amendment No. 129-16205 issued November 4, 2002.

Second Administrative Amendment No. 129-16765 issued December 13, 2002.

Third Administrative Amendment No. 129-17788 issued August 26, 2003.

First Minor Permit Revision No.: 129-18395	Pages Revised: 4, 5, and 32a
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 3, 2003

SECTION D.3 FACILITY OPERATION CONDITIONS
Insignificant Activities

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Compliance Determination Requirements

D.3.2 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

SECTION D.4 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-2-4]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

D.4.2 Record Keeping Requirements [326 IAC 12][40 CFR 60.48c]

Certification Form

Emergency Occurrence Form

Natural Gas Fired Boiler Certification

Quarterly Report Form

Quarterly Deviation and Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pharmaceutical packaging and research and development source.

Authorized Individual:	Thomas R. Ward
Source Address:	State Highway 62 East, Mount Vernon, Indiana 47620
Mailing Address:	2400 West Lloyd Expressway, Evansville, Indiana 47721
SIC Code:	2834
Source Location Status:	Posey
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- a) Two (2) natural gas fired boilers installed in 1970, identified as S-1 and S-2, each with a maximum heat input of 30.64 million (MM) British thermal units (Btu) per hour, and exhausting through stacks S-1 and S-2, respectively. Boilers S-1 and S-2 use No. 2 fuel oil as back-up fuel.
- b) One (1) natural gas fired incinerator, installed in 1979, and identified as S-4, with maximum heat input capacity of 1.5 MMBtu/hr and a maximum process capacity of 250 lbs/hr, and exhausting through stack s-4.
- c) One (1) natural gas fired boiler with a maximum capacity of 32.6 MMBTU/hr. This boiler will be used temporarily while another boiler is repaired.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) The following VOC storage containers:
 - (a) One (1) 1,130 gallon aboveground storage tank containing gasoline.
 - (b) One (1) 1,130 gallon aboveground storage tank containing diesel fuel.
 - (c) One (1) 300 gallon aboveground storage tank containing diesel fuel.
 - (d) One (1) 250 gallon aboveground storage tank containing diesel fuel.

SECTION D.4

FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (c) One (1) natural gas fired boiler with a maximum capacity of 32.6 MMBTU/hr. This boiler will be used temporarily while another boiler is being repaired.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 32.6 MMBTU/hr boiler shall be limited to 0.33 pounds per MMBTU heat input.

D.4.2 Record Keeping Requirements [326 IAC 12][40 CFR 60.48c(g) & (i)]

- (a) Pursuant to 40 CFR 60.48c(g), the owner or operator shall record and maintain records of the amounts of each fuel combusted during each day.
- (b) Pursuant to 40 CFR 60.48c(i), the owner or operator shall maintain these records for a period of two years following the date of such record.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Minor Permit Revision to a Federally Enforceable State
Operating Permit**

Source Background and Description

Source Name:	Mead Johnson & Company
Source Location:	State Highway 62 East, Mount Vernon, Indiana 47620
County:	Posey
SIC Code:	2834
Operation Permit No.:	129-13970-00021
Operation Permit Issuance Date:	February 20, 2002
Permit Revision No.:	129-18395
Permit Reviewer:	drpoole

The Office of Air Quality (OAQ) has reviewed a revision application from Mead Johnson & Company relating to the addition of a portable 32.6 MMBTU/hour natural gas fired boiler. This boiler will be a temporary addition while one of the plant's boiler is being repaired.

History

Mead Johnson & Company was issued a FESOP on February 20, 2002. On November 17, 2003, an application was submitted to OAQ to add this boiler.

Justification for the Revision

The FESOP is being modified through a Minor Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(d)(4). The revision's emissions will be less than 25 tons per year of NO_x but be greater than 10 tons per year.

Existing Approvals

The source was issued a FESOP (129-13970-00021) on February 20, 2002. The source has since received the following:

- (a) First Administrative Amendment No. 129-16205 issued on November 4, 2002.
- (b) Second Administrative Amendment No. 129-16765 issued on December 13, 2002.
- (c) Third Administrative Amendment No. 129-17788 issued on August 26, 2003.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 17, 2003.

Emission Calculations

See Appendix A (pages 1 and 2) of this document for detailed emission calculations.

Potential to Emit of the Revision Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	0.3
PM-10	1.1
SO ₂	0.1
VOC	0.8
CO	12.0
NO _x	14.3

HAPs	Potential to Emit (tons/yr)
Hexane	0.25
Others	Negligible
Total	0.25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-8-11.1(d).

Potential to Emit of the Source including the revision

Pollutant	Source (ton/yr)	Revision (ton/yr)	Source + Revision (ton/yr)
PM	65.26	0.3	65.56
PM-10	65.26	1.1	65.56
SO ₂	82.72	0.1	82.82
VOC	2.44	0.8	3.24
CO	26.32	12.0	38.32
NO _x	43.41	14.3	57.71
Single HAP	9.0	0.3	9.0
Combo. HAP	9.1	0.3	9.1

Source information taken from FESOP 13970.

This source remains a FESOP including the emission from the revision.

County Attainment Status

The source is located in Posey County.

Pollutant	Status
PM-10	Attainment

SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Posey County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Posey County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Proposed Revision

PTE from the proposed modification (based on 8760 hours of operation per year at rated capacity including enforceable emission control and production limit where applicable):

Pollutant	PM (ton/yr)	PM-10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0.3	1.1	0.1	0.8	12.0	14.3
PSD or Offset Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) The boiler is subject to the New Source Performance Standard, 326 IAC 12, Subpart Dc (40 CFR 60.40c – 48c) because the capacity of the boiler is greater than 10 MMBTU/hour.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Posey County, which is not one of the specifically listed counties, and the potential to emit of CO, VOC, NO_x, PM-10 (including fugitive emissions), or SO₂ is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because no new or reconstructed facilities with a PTE of any single HAP at 10 tons per year or 25 tons per year of a combination of HAPs have been installed since July 27, 1997. Therefore, 326 IAC 2-4.1-1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Emission limitations)

The boiler particulate matter emissions shall be limited by the following equation:

$$Pt = 1.09/Q^{0.26}$$

For this boiler, the equation becomes $Q = 2(30.64) + 32.6 = 93.88^{0.26} = 3.26$
 $Pt = 1.09/3.26 = 0.33$ pounds per MMBTU heat input.

The boiler will meet this requirement. $(1.9 \text{ lb/MMft}^3)(1 \text{ ft}^3/1050 \text{ BTU}) = 0.002 \text{ lb/MMBTU}$

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Changes to the Permit

Section A.2 and Section D.4 shall have the following facility description added:

One (1) natural gas fired boiler with a maximum capacity of 32.6 MMBTU/hr. This boiler will be used temporarily while another boiler is being repaired.

Section D.4 will have the following conditions:

D.4.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 32.6 MMBTU/hr boiler shall be limited to 0.33 pounds per MMBTU heat input.

D.4.2 Record Keeping Requirements [326 IAC 12][40 CFR 60.48c(g) & (i)]

a) Pursuant to 40 CFR 60.48c(g), the owner or operator shall record and maintain records of the amounts of each fuel combusted each day.

b) Pursuant to 40 CFR 60.48c(i), the owner or operator shall maintain these records for a period of two years following the date of such record.

The table of contents has been adjusted for these changes.

Conclusion

The permit revision shall be added to the conditions of the FESOP as 129-18395-00021.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: Mead Johnson & Company****Address City IN Zip: State Highway 62 East, Evansville, Indiana 47620****CP: 129-18395****Plt ID: 129-00021****Reviewer: drpoole****Date: 11/26/03**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

32.6

285.6

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.3	1.1	0.1	14.3	0.8	12.0

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 7/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

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See page 2 for HAPs emissions calculations.

updated (corrected date) rlm 3/03

Appendix A: Emissions Calculations

Page 2 of 2 TSD App A

Natural Gas Combustion Only

MM BTU/HR <100

Small Industrial Boiler

HAPs Emissions

Company Name: Mead Johnson & Company

Address City IN Zip: State Highway 62 East, Evansville, Indiana 47620

CP: 129-18395

Plt ID: 129-00021

Reviewer: drpoole

Date: 11/26/03

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.999E-04	1.713E-04	1.071E-02	2.570E-01	4.855E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	7.139E-05	1.571E-04	1.999E-04	5.426E-05	2.999E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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updated (corrected date) rlm 3/03